Treatment of Frey's syndrome (gustatory sweating) with topical glycopyrrolate: case report

Treatment of Frey's syndrome with topical glycopyrrolate is well described in the specialist literature but is generally not well known. It is likely there are a number of people in New Zealand that have this problem, but who are unaware of this potentially effective and simple treatment. However when I saw my first patient with Frey's syndrome a few years ago, I soon discovered that topical glycopyrrolate was not something that was readily available.

Frey's syndrome or localised facial gustatory sweating and flushing is a rare condition which is most commonly seen as a sequelae of superficial parotidectomy. The patient, a 45 year old female, had had a left superficial parotidectomy five years before for recurrent parotitis. Following the operation, she developed sweating on the left side of her face whenever she ate and this caused significant social embarrassment. When the problem first occurred her surgeon had told her nothing could be done. In fact a number of treatments are available and include commercial antiperspirants, topical 20% aluminium chloride in alcohol, stellate ganglion blocks, tympanic neurectomy, and subdermal insertion of fascia lata grafts. I believe none of these treatments are as simple and generally as effective as topical glycopyrrolate.

Glycopyrrolate is a quarternary amonium anticholinergic agent which does not cross the blood brain barrier, unlike scopolamine, and is associated with a very low incidence of side effects. It has been shown to be an effective treatment for Frey's syndrome [1,2]. The glycopyrrolate (Bomack Laboratories) was formulated in two strengths, 1% and 2% and in two formulations, gel and a cream. The cream was prepared by dissolving the glycopyrrolate in a minimum amount of water and incorporating into cetomacrogol cream. The cream was adjusted to pH 3.0-3.5. The gel was prepared by incorporating the powder into Sonigel in which it rapidly dissolved.

The patient commenced treatment with 1% formulations and as these controlled symptoms for up to five days with the only adverse effect being an occasional dry throat, treatment was maintained at this strength. The gel was a cosmetically more acceptable formulation as the affected area extended into the hairline.

The main precaution is to avoid use in patients with narrow angle glaucoma.

The following instructions were supplied to the patient: (1) Avoid applying to nose, mouth and eyes. (2) Never apply to cut or infected skin. (3) Effectiveness may increase by applying twice in the same day, or by rubbing into the skin after application. (4) Always wash hands well afterwards with soap and water. Do not wash the treated part of the face for 3 to 4 hours. Avoid contact between the eyelids and the wash cloth used on the treatment area. (5) Keep well away from children. (6) Keep in a cool place. (7) If a significant side effect such as blurred vision or dry mouth occurs and persists, temporarily discontinue and contact your doctor. (8) Do not reapply until sweating occurs.

Thanks to Julie Knight, Intern Pharmacist, who developed the formulations.

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Passive smoking in New Zealand

Mr Lee's letter to the NZ Medical Journal (NZ Med J 1989; 102: 448) contains much the same arguments as in his previous efforts on behalf of the tobacco industry in New Zealand and other countries [1-4], each of which have previously been rebutted [5-7].

Mr Lee need not have pointed out to us that several studies of passive smoking and ischaemic heart disease involved small numbers of cases. Indeed he does not appear to have grasped that this is precisely the reason why we chose to use the results of a meta analysis in our estimates. What is important is the overall numbers in the meta analysis, not the numbers in selected subgroups in specific studies.

We fail to see the point that Mr Lee is trying to make in his comment about the Japanese prospective study; there is nothing statistically implausible about a significant relationship between passive smoking and IHD failing to show up on 14 years' follow up [8], but appearing on 17 year follow up [9]. Perhaps Mr Lee is unaware that the risk of IHD is related to duration of exposure (pack-years) to cigarette smoke, and that extending the duration of follow up increases the statistical power of the study?

We cannot specifically comment on Mr Lee's references to his own writings on misclassification bias. Two of his citations on this subject are references to papers given by Mr Lee himself at overseas conferences, which were therefore inaccessible to us. Nevertheless his claim that misclassification of a proportion of smokers as nonsmokers has led to an artefactual association of lung cancer with passive smoking appears most unlikely. It is just as likely that misclassification of passive smokers as nonexposed nonsmokers has led to an underestimate of the risks of passive smoking, ie, correcting this source of bias is likely to raise the relative risks of lung cancer and ischaemic heart disease.

Finally, we would like to acknowledge Mr Lee's comment that the evidence relating lung cancer to passive smoking is based on 27, not merely 13 studies. As Bradford Hill remarked [10], consistency of an observation across different studies increases our confidence in the belief that the association is causal.

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Is empathy unhealthy?

I have read with some amusement and interest the description of various occupational or hobby related syndromes, eg, space invaders' wrist, and triathlon tip, which surface in the medical literature from time to time. Each has described the hazards unwittingly encountered in one of a wide range of activities. Having been a recent sufferer from another such unexpected condition, and thus considerably less amused, I felt it appropriate to add to this mounting literature of cautionary tales.

Courses in interviewing skills stress the importance of nonverbal communication. It is not sufficient to use the right words, or right tone. The positioning of patient, doctor and desk affects the power balance between patient and doctor. We have been encouraged to move out from behind our desks, to sit close to the patient, and when appropriate to use touch in our communication. Body language including body posture must be congruent with the message we are attempting to communicate. A forward leaning body posture denotes a readiness to listen, a backward leaning (or, for most chairs, the sitting straight up) position denotes a negative attitude [1].

The literature on this subject to my knowledge has concentrated on the effectiveness of the communication, and patient satisfaction. However, are there hazards that accompany this improved communication?

I report one case (myself) of cervical spine dysfunction leading to paraesthesia in the brachial plexus distribution, in a patient with frequent thoracic facet problems in the past. The cause appears to be an occupational disease – that of "empathetic back" – too much body language of the "I am listening" variety. (An alternative label would be that of poor posture!)

Have other medical practitioners and those in other listening professions noted the same problem. Do we need to add to the literature yet another occupational disease?

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